

What is claimed is:

1. A spindle motor comprising:
  - a body of rotation rotating with an axis of rotation thereof being centered;
  - a magnet mounted on the body of rotation for making the body of rotation rotate by an action of a varying magnetic field;
  - a coil generating the varying magnetic field acting on the magnet; and
  - a core formed by laminating a plurality of doughnut-like magnetic steel sheets each with a plurality of protrusions provided on a periphery for winding wire of the coil,
    - the improvement wherein
      - the core with a specified thickness is formed by laminating thinnest possible magnetic steel sheets.
2. The spindle motor according to claim 1, wherein the thinnest possible magnetic steel sheet forming the core has a thickness of 0.15 mm to 0.35 mm.
3. The spindle motor according to claim 2, wherein the thinnest possible magnetic steel sheet has a thickness of about 0.2 mm.
4. The spindle motor according to claim 1, wherein the magnetic steel sheet is provided with a plurality of riveting portions at each of which an indentation is provided on one side of the steel sheet to form a projection on the other side, and at each of the riveting portions, the projection on one

magnetic steel sheet is fitted to the indentation of another magnetic steel sheet for being riveted to thereby make up a laminated structure of the magnetic steel sheets for the core.

5. A core for a spindle motor wherein the core is a lamination of magnetic steel sheets each having a thickness of 0.15 mm to 0.35 mm.

6. A core for a spindle motor according to claim 5 wherein the magnetic steel sheet has a thickness of about 0.2 mm.

7. A method of manufacturing a spindle motor provided with a core formed by laminating a plurality of magnetic steel sheets, the method comprising the steps of:

forming a plurality of riveting portions on each of the magnetic steel sheets by forming at each of the riveting portions an indentation on one side of the steel sheet to form a projection on the other side;

at each of the riveting portions, fitting the projection on one magnetic steel sheet to the indentation of another magnetic steel sheet: and

laminating a plurality of the magnetic steel sheets one by one by riveting the indentation and the projection fitted thereto at each of the riveting portions for making up the core.